

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A purified recombinant thermostable enzyme which is a variant of the enzyme having an amino acid sequence of SEQ ID NO:1 and has the following physicochemical properties:

(1) Action

Forming non-reducing saccharides having a trehalose structure as an end unit and having a degree of glucose polymerization of at least 3 from ~~maltotetraose~~ and reducing amylaceous saccharides having a degree of glucose polymerization of at least 3;

(2) Optimum temperature

About 75°C when incubated in 20 mM acetate buffer (pH 5.5);

(3) Optimum pH

About 5.0-5.5 when incubated at 60°C for 60 min;

(4) pH Stability

About 4.5-9.5 when incubated at 25°C for 16 hours;

(5) Thermostability

Substantially not inactivated even when incubated
in an aqueous solution (pH 7.0) at 85°C for 60
min.; and

(6) Amino acid sequence

Having an amino acid sequence of ~~at least two~~
~~contiguous amino acid residues in SEQ ID NO:3~~
~~and/or SEQ ID NO:4~~ SEQ ID NO:1 in which one or
more amino acids are replaced, deleted, or added
and not having the amino acid sequences of ~~SEQ ID~~
~~NO:1, SEQ ID NO:3~~ ~~[[, and]]~~ and/or SEQ ID NO:4.